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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,685	12/31/2003	Steven T. Adamy	55216	2168
45980 7590 11/14/2007 CHURCH & DWIGHT CO., INC. LAW DEPT. - PATENTS 469 NORTH HARRISON STREET PRINCETON, NJ 08543-5297			EXAMINER COHEN, AMY R	
			ART UNIT 2859	PAPER NUMBER
			NOTIFICATION DATE 11/14/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

STEVE.SHEAR@CHURCHDWIGHT.COM  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/749,685	<b>Applicant(s)</b> ADAMY, STEVEN T.	
	<b>Examiner</b> Amy R. Cohen	<b>Art Unit</b> 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

In light of the Appeal Brief filed by Applicant on July 26, 2007, the Final Office Action dated January 23, 2007 is vacated. A new Non-final Office Action follows. Any inconvenience to Applicant is regretted.

#### ***Drawings***

1. The drawings submitted August 14, 2006 are objected to because the drawings are labeled "Replacement." However, it appears that the sheet of figures should be labeled "New Sheet" and Figures 1, 2A, and 2B shown on this sheet should be labeled 9, 10A, and 10B, respectively, since it appears that these are additional figures and not replacement figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu et al. (U. S. Patent No. 3,768,976) in view of Patel (U. S. Patent No. 5,053,339).

Regarding claims 1-7: Hu et al. discloses a timing device (10) for visually determining the passage of a preselected period of time comprising: a redox indicator (17, 19) deposited within a matrix, said matrix being exposable to air such that over a period of time during exposure to air, the redox indicator changes color and thereby indicates the passage of a predetermined period of time (Col 1, lines 8-16, Col 2, line 50-Col 3, line 16, Col 6, lines 41-67, Col 8, lines 9-32).

Hu et al. discloses the timing device wherein the matrix is a film-forming polymer (Abstract, Col 3, lines 25-33, Col 4, lines 9-26, Col 6, lines 59-67, Col 8, lines 9-32); wherein the film-forming polymer is a cellulose derivative (Col 8, lines 9-32); wherein said matrix has a thickness based on a wet film of said polymer of from 5 to 50 mil (Col 3, lines 25-33, Col 4, lines 9-26, Col 6, lines 59-67, Col 8, lines 9-32); wherein the device is attached to a package containing a consumer product (Col 1, lines 8-16, Col 6, lines 41-67).

Hu et al. does not disclose the timing device comprising the redox indicator in combination with a reactable metal ion; wherein the matrix is attached to an adhesive tape and is

adhered to a package containing a consumer product; wherein the redox indicator is selected from the group consisting of indigo carmine and methylene blue; wherein the metal ion is  $\text{Sn}^{2+}$ .

Patel discloses a timing device comprising a redox indicator deposited within a matrix and in combination with a reactable metal ion (Col 7, lines 18-35, Col 8, lines 4-32, Col 11, line 23-Col 12, line 50); wherein the matrix is attached to an adhesive tape and is adhered to a package containing a consumer product (Abstract, Col 2, lines 46-58); wherein the redox indicator is selected from the group consisting of indigo carmine (Col 12, lines 33-20) and methylene blue (Table 1, Col 12, lines 4-24); wherein the metal ion is  $\text{Sn}^{2+}$  (Col 11, line 56-Col 12, line 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reactable metal ion in combination with the redox indicator of Hu et al., as taught by Patel, in order to more closely indicate the shelf-life of a product by using an activator-indicator combination which most accurately reflects the shelf-life of the particular product at the temperature of storage (Patel, Col 2, lines 28-45, Col 3, line 66-Col 4, line 22).

Regarding claim 8: Hu et al. discloses a method for determining when a consumer product has reached an end to its useful shelf-life comprising: preparing a timing device comprising a redox indicator deposited within a matrix, said matrix being exposable to air (Col 1, lines 8-16, Col 2, line 50-Col 3, line 16, Col 6, lines 41-67, Col 8, lines 9-32); attaching the timing device to an outside surface of the consumer product (Col 1, lines 8-16, Col 6, lines 41-67); observing the timing device for color changes, which color changes coincide with the end of the useful shelf-life of the said consumer product (Col 2, line 50-Col 3, line 16).

Hu et al. does not disclose the method wherein the redox indicator deposited within a matrix also contains a reactable metal ion.

Patel discloses the method comprising a redox indicator deposited within a matrix and in combination with a reactable metal ion (Col 7, lines 18-35, Col 8, lines 4-32, Col 11, line 23-Col 12, line 50); attaching the timing device to an outside surface of the consumer product a consumer product (Abstract, Col 2, lines 46-58); observing the timing device for color changes, which color changes coincide with the end of the useful shelf-life of the said consumer product (Col 3, line 66-Col 4, line 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reactable metal ion in combination with the redox indicator of Hu et al., as taught by Patel, in order to more closely indicate the shelf-life of a product by using an activator-indicator combination which most accurately reflects the shelf-life of the particular product at the temperature of storage (Patel, Col 2, lines 28-45, Col 3, line 66-Col 4, line 22).

#### ***Response to Arguments***

4. Applicant's arguments, see Appeal Brief, filed July 26, 2007, with respect to the rejection(s) of claim(s) 1-8 under Montalto et al. in view of Preziosi et al and in view of Anderson have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hu et al. in view of Patel.

#### ***Conclusion***

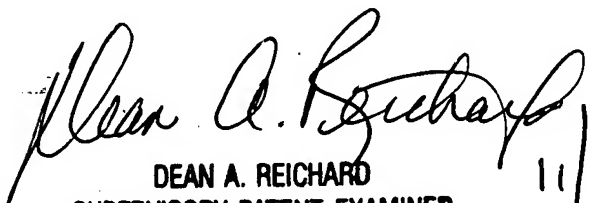
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kagan et al. (U. S. Patent No. 6,373,786).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on (571) 272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARC  
November 7, 2007

  
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11/7/07